

What is claimed is:

1. An in-wheel motor system having a hollow direct drive motor which is provided in a wheel and whose stator side is supported to a part around the wheel of a vehicle by elastic bodies and/or an attenuation mechanism, wherein

the non-rotating side case of the above motor is supported to the part around the wheel of the vehicle by a buffer mechanism which comprises a direct-acting guide with springs composed of a direct-acting guide consisting of a linear bearing and a rod and spring members integrated with the direct-acting guide, two plates interconnected by this direct-acting guide with springs in such a manner that their moving directions are limited to the vertical direction of the vehicle, and a damper for interconnecting the two plates, moving in the vertical direction of the vehicle.

2. The in-wheel motor system according to claim 1, wherein a fixing member for attaching the linear bearing as the fixing portion of the direct-acting guide is mounted on a knuckle attachment plate connected to a knuckle, receiving members for attaching both ends of the rod as the movable portion of the direct-acting guide are mounted on a motor attachment plate connected to the non-rotating side case of the motor, the fixing portion and the movable portion of

the direct-acting guide are attached to the knuckle attachment plate and the motor attachment plate, respectively, and the spring members are interposed between the fixing member and the receiving member.

3. The in-wheel motor system according to claim 2, wherein the spring members are arranged on the outer sides of the rod.